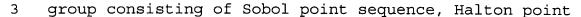
WE CLAIM:

- 1 1. A method for structuring a portfolio, comprising:
- 2 (i) calculating, by computer, a number of potential-
- 3 loss function values at points in a domain of stochastic
- 4 market factors, the points being obtained from a low-
- 5 discrepancy deterministic sequence;
- 6 (ii) determining a cumulative distribution function
- 7 of the function values;
- 8 (iii) determining value at risk as one of the function
- 9 values corresponding to a specified level of confidence; and
- 10 (iv) structuring the portfolio depending on a
- 11 comparison of the value at risk with a specified target
- 12 value.
 - 1 2. The method according to claim 1, wherein
 - 2 determining the cumulative distribution function comprises
 - 3 sorting the function values.
 - 1 3. The method according to claim 1, wherein the
 - 2 number of function values is predetermined.
 - 1 4. The method according to claim 1, wherein the
 - 2 number of function values is determined automatically.
 - 1 5. The method according to claim 1, wherein
 - 2 calculating comprises allocating function evaluations among
 - 3 a plurality of processors.
 - 1 6. The method according to claim 1, wherein the low-
 - 2 discrepancy deterministic sequence is selected from the





- 4 sequence, Hammersley point sequence, hyperbolic-cross point sequence and generalized Faure sequence.
- 7. A system for structuring a portfolio, comprising:
- 2 (i) means for calculating a number of potential-loss
- 3 function values at points in a domain of stochastic market
- 4 factors, the points being obtained from a low-discrepancy
- 5 deterministic sequence;
- 6 (ii) means for determining a cumulative distribution
- 7 function of the function values;
- 8 (iii) means for determining value at risk as one of
- 9 the function values corresponding to a specified level of
- 10 confidence; and
- 11 (iv) means for structuring the portfolio depending on
- 12 a comparison of the value at risk with a specified target
- 13 value.
 - 1 8. The system according to claim 7, wherein the
 - 2 means for determining the cumulative distribution function
 - 3 comprises means for sorting the function values.
 - 1 9. The system according to claim 7, wherein the
 - 2 number of function values is predetermined.
 - 1 10. The system according to claim 7, wherein the
 - 2 means for calculating comprises means for determining the
 - 3 number of function values.



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- The system according to claim 7, wherein the 1
- means for calculating comprises means for allocating 2
- function evaluations among a plurality of processors. 3
- 1 12. The system according to claim 7, wherein the low-
- 2 discrepancy deterministic sequence is selected from the
- 3 group consisting of Sobol point sequence, Halton point
- 4 sequence, Hammersley point sequence, hyperbolic-cross point
- 5 sequence and generalized Faure sequence.
 - £3. A system for structuring a portfolio, comprising a processor which is instructed for:
 - (i) calculating potential-loss function values at points in a domain of stochastic market factors, the points being obtained from a low-discrepancy deterministic sequence;
 - determining a cumulative distribution function of the function values;
 - (iii) determining value at risk as one of the function values corresponding to a specified level of confidence; and
- structuring the portfolio depending on a 11 comparison of the value at risk with a specified target 12 13 value.
 - The system according to claim 13, wherein, in 1 2 determining the cumulative distribution function, the processor is instructed for sorting the function values. 3
 - The system according to claim 13, wherein the number of function values is predetermined.







- 1 16. The system according to claim 13, wherein the 2 processor is instructed for determining the number of 3 function values.
 - 17. The system according to claim 13, wherein, for calculating, the processor is instructed for allocating function evaluations among a plurality of sub-processors.
 - 18. The system according to claim 13, wherein the low-discrepancy deterministic sequence is selected from the group consisting of Sobol point sequence, Halton point sequence, Hammersley point sequence, hyperbolic cross point sequence and generalized Faure sequence.

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